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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,429	11/15/2000	David A. Kapilow	1999-0096-4	5917

7590 09/20/2004
AT & T Corporation
PO Box 4110
Middletown, NJ 07748

EXAMINER

HARPER, V PAUL

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,429

Applicant(s)

KAPILOW, DAVID A.

Examiner

V. Paul Harper

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/26/02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Detailed Action

U.S. National Stage Application

1. Acknowledgement is made of the indication that the present application is filed under 35 U.S.C. 371, of the indication that the required form PCT/DO/EO/903 is present, and of the use of transmittal form PCT/DO/EO/1390. Thus, the present application is being treated as a filing under 35 U.S.C. 371.

Information Disclosure Statement

2. The Examiner has considered the references listed in the Information Disclosure Statement dated 2/26/02. A copy of the Information Disclosure Statement is attached to this office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 09/700524 in view of Stenger et al. ("A New Error

Concealment Technique for Audio Transmission with Packet Loss”), hereinafter referred to as Stenger.

Regarding claim 1, copending Application No. 09700524 (claims 1 and 3) includes the following limitations:

- synthesizing a speech signal corresponding to an unavailable packet (claim 1, lines 9-10).
- determining an overlap-add window to use in combining a portion of the synthesized speech signal with a subsequent speech signal resulting from a received packet being decoded by the receiver, ... (claim 3, lines 8-9).

But Application No. 09/700524 fails to specifically claim:

- a) wherein the size of the overlap-add window is determined based on the duration of the unavailability of packets;
- b) performing an overlap-add operation on the portion of the synthesized speech signal and such speech signal with use of the overlap-add window.

However, the examiner contends that this concept was well known in the art, as taught by Stenger.

In the same field of endeavor, Stenger discloses an error concealment technique for audio transmission with packet loss. Stenger's technique includes the steps of determining the size of the gap (Figure 1, d_{lost} , §3; and §4, simulations run for single and double packet loss), a) above; and performing an overlap add operation to fill the gap (Figure 1, §1 INTRODUCTION), b) above.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chen by specifically providing synthesis steps, as taught by Stenger, because it is well known in the art at the time of invention that this approach works better than either waveform substitution or pitch waveform replication (Perkins, p. 45, ¶ "Time Scale Modification").

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (U.S. Patent 5,615,298), hereinafter referred to as Chen, in view of Stenger and further in view of Perkins et al. ("A Survey of Packet Loss Recovery Techniques for Streaming Audio" IEEE Network, Sept./Oct. 1998), hereinafter referred to as Perkins.

Regarding claim 1, Chen discloses a method for excitation signal synthesis during frame erasure or packet loss. Chen's method includes:

- synthesizing a speech signal corresponding to an unavailable packet (col. 5, §2. Synthesis Mode).

But Chen fails to specifically disclose:

a) determining an overlap-add window to use in combining a portion of the synthesized speech signal with a subsequent speech signal resulting from a received packet being decoded by the receiver, wherein the size of the overlap-add window is determined based on the duration of the unavailability of packets;

b) performing an overlap-add operation on the portion of the synthesized speech signal and such speech signal with use of the overlap-add window.

However, the examiner contends that this concept was well known in the art, as taught by Stenger.

In the same field of endeavor, Stenger discloses an error concealment technique for audio transmission with packet loss. Stenger's technique includes the steps of determining the size of the gap (Figure 1, d_{lost} , §3; and §4, simulations run for single and double packet loss), a) above; and performing an overlap add operation to fill the gap (Figure 1, §1 INTRODUCTION), b) above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chen by specifically providing the synthesis steps, as taught by Stenger, because it is well known in the art at the time of invention that this approach works better than either waveform substitution or pitch waveform replication (Perkins, p. 45, ¶ "Time Scale Modification").

Citation of Pertinent Art

5. The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

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c) Chen (U.S. Patent 6,351,730) discloses a technique for scalable and embedded speech and audio coding with adaptive frame loss concealment.

Conclusion

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. V. Paul Harper whose telephone number is (703) 305-4197. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645. The fax phone number for the Technology Center 2600 is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service office whose telephone number is (703) 306-0377.

VPH/vph
September 13, 2004



VIJAY CHAWAN
PRIMARY EXAMINER